

1 Amendment to the Claims

2 In the Claims:

3 Please amend Claims 1 and 55 as follows:

4 1. (Currently Amended) A system for detecting ~~a detecting~~ hazardous particles associated
5 with a parcel, comprising:

6 (a) a housing into which a parcel to be analyzed can be placed, so that a parcel can
7 be isolated from an environment outside the housing;

8 (b) a triggering sampler in fluid communication with a volume of air within said
9 housing, said triggering sampler capable of detecting particles associated with a parcel that are
10 entrained within the volume of air in said housing, said triggering sampler generating a detection
11 signal in response to the detection of such particles; and

12 (c) a detecting sampler in fluid communication with said volume of air and
13 electrically coupled to respond to the detection signal from said triggering sampler, said detecting
14 sampler, in response to said detection signal, removing particles entrained within said volume of air,
15 thereby obtaining a sample of particles, to enable an analysis to determine if particles associated with
16 a parcel that are collected by the detecting sampler are hazardous.

17 2. (Original) The system of Claim 1, wherein said system can accommodate parcels that
18 include at least one of a postcard, an envelope, a flat, and a box.

19 3. (Original) The system of Claim 1, wherein particles associated with a parcel comprise at
20 least one of particles adhered to an outer surface of a parcel, particles adhered to an inner surface of a
21 parcel, particles entrained in a volume of air contained within a parcel, and particles contained within
22 an inner volume of a parcel.

23 4. (Original) The system of Claim 1, wherein said triggering sampler is further adapted to
24 respond to biological particles, distinguishing between biological and non-biological particles.

25 5. (Original) The system of Claim 1, wherein said housing is maintained at a negative
26 pressure when the system is operational.

27 6. (Original) The system of Claim 1, wherein said housing comprises a high efficiency
28 particulate air (HEPA) filter in fluid communication with said volume of air, said HEPA filter being
29 adapted to filter air exhausted from said housing, to remove any particles from the air.

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1 7. (Original) The system of Claim 1, further comprising a parcel feed system that conveys a
2 plurality of parcels through said housing, said parcel feed system introducing a plurality of parcels
3 into said housing so that each parcel is separated from other parcels.

4 8. (Original) The system of Claim 1, further comprising means for entraining particles
5 associated with a parcel contained in said housing into said volume of air.

6 9. (Original) The system of Claim 8, wherein said means comprises a laser adapted to form
7 at least one opening in a parcel.

8 10. (Original) The system of Claim 8, wherein said means comprise a mechanical perforator
9 adapted to form at least one opening in a parcel.

10 11. (Original) The system of Claim 8, wherein said means comprises a splitting blade
11 adapted to slice open a parcel.

12 12. (Original) The system of Claim 8, wherein said means comprises a device adapted to
13 apply pressure to a parcel, thereby causing particles associated with a parcel to be dispersed into said
14 volume of air contained within said housing.

15 13. (Original) The system of Claim 8, wherein said means comprises a blower disposed
16 within said housing, said blower directing a jet of fluid toward a parcel, said jet of fluid enhancing an
17 aerosolization of particles associated with a parcel.

18 14. (Original) The system of Claim 1, wherein said triggering sampler comprises a particle
19 counter.

20 15. (Original) The system of Claim 14, wherein said particle counter comprises means for
21 distinguishing between biological particles and non-biological particles.

22 16. (Original) The system of Claim 15, wherein the detection signal is generated only in
23 response to a substantial increase in a number of biological particles being detected by the triggering
24 sampler.

25 17. (Original) The system of Claim 15, wherein said particle counter comprises:

26 (a) a laser producing light in a waveband selected to produce auto-fluorescence in
27 nicotinamide adenine dinucleotide (NAD); and

28 (b) at least one photon sensor that detects auto-fluorescence light emitted from
29 laser excited NAD, producing a particle count signal in response thereto.

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1 18. (Original) The system of Claim 17, further comprising a processor electrically coupled to
2 said at least one photon sensor, said processor producing a detection signal in response to a biological
3 particle count based on said particle count signal.

4 19. (Original) The system of Claim 18, wherein said processor prevents said detection signal
5 from being generated until a predefined number of biological particles are detected.

6 20. (Original) The system of Claim 17, wherein said laser comprises a diode laser that emits
7 light having a wavelength of between about 355 nanometers and about 370 nanometers.

8 21. (Original) The system of Claim 1, wherein said triggering sampler comprises a virtual
9 impactor in fluid communication with said volume of air, said virtual impactor separating a fluid
10 stream into a major flow and a minor flow, the major flow including a minor portion of particles that
11 are above a predetermined size and the minor flow including a major portion of the particles that are
12 above the predetermined size, said virtual impactor including a minor flow outlet through which the
13 minor flow exits the virtual impactor, said detection signal being produced in response to particles
14 detected in the minor flow.

15 22. (Original) The system of Claim 1, wherein said triggering sampler comprises:

16 (a) a radial arm collector in fluid communication with said volume of air, said
17 radial arm collector collecting any particles that were entrained in said volume of air and retaining
18 said particles upon a surface of said radial arm collector;

19 (b) a rinse fluid supply;

20 (c) a rinse fluid line in fluid communication with said rinse fluid supply, said rinse
21 fluid line conveying a rinse fluid onto the surface so that any particles adhering to said surface are
22 carried away with the rinse fluid;

23 (d) a collection volume disposed adjacent to said surface, such that particles rinsed
24 from said surface are carried by the rinse fluid into the collection volume; and

25 (e) a particle counter disposed adjacent to said collection volume, and said particle
26 counter counting particles carried into said collection volume.

27 23. (Original) The system of Claim 22, wherein said triggering sampler further comprises a
28 virtual impactor in fluid communication with said volume of air, said virtual impactor separating a
29 fluid stream into a major flow and a minor flow, the major flow including a minor portion of particles
30 that are above a predetermined size and the minor flow including a major portion of the particles that

are above the predetermined size, said virtual impactor including a minor flow outlet through which the minor flow exits the virtual impactor, said minor flow outlet being in fluid communication with said radial arm collector.

24. (Original) The system of Claim 22, wherein said rinse fluid supply comprises a rinse fluid that includes an enzyme that degrades cellulose.

25. (Original) The system of Claim 1, wherein said triggering sampler comprises a prefilter that removes particles above a predetermined size from said volume of air.

26. (Original) The system of Claim 1, further comprising a prefilter that removes particles above a predetermined size from said volume of air.

27. (Original) The system of Claim 1, wherein said detecting sampler comprises a prefilter that removes particles above a predetermined size from said volume of air.

28. (Original) The system of Claim 1, wherein said detecting sampler comprises:

(a) a radial arm collector in fluid communication with said volume of air, said radial arm collector collecting particles entrained in said volume of air and retaining said particles upon a surface of said radial arm collector;

(b) a rinse fluid supply,

(c) a rinse fluid line in fluid communication with said rinse fluid supply, said rinse fluid line conveying a rinse fluid onto the surface so that any particles adhering to said surface are carried away with the rinse fluid; and

(d) a collection volume disposed adjacent to said surface, such that particles rinsed from said surface are carried by the rinse fluid into the collection volume for analysis to determine if the particles comprise a harmful substance.

29. (Original) The system of Claim 28, wherein said rinse fluid supply comprises a rinse fluid that includes an enzyme that degrades cellulose.

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1 30. (Original) The system of Claim 28, wherein said detecting sampler further comprises a
2 virtual impactor in fluid communication with said volume of air, said virtual impactor separating a
3 fluid stream into a major flow and a minor flow, the major flow including a minor portion of particles
4 that are above a predetermined size and the minor flow including a major portion of the particles that
5 are above the predetermined size, said virtual impactor including a minor flow outlet through which
6 the minor flow exits the virtual impactor, said minor flow outlet being in fluid communication with
7 said radial arm collector.

8 31. (Original) The system of Claim 1, wherein said detecting sampler comprises:

9 (a) a disposable radial arm collector in fluid communication with said volume of
10 air, said radial arm collector collecting any particles that were entrained in said volume of air and
11 retaining such particles upon a surface of said disposable radial arm collector; and

12 (b) a prime mover drivingly coupled to rotate a collector arm of said disposable
13 radial arm collector, so that the collector arm impacts particles entrained in the fluid as the collector
14 arm is rotated, said particles being retained on the surface of the collector arm.

15 32. (Original) The system of Claim 31, wherein said disposable radial arm collector is
16 magnetically coupled to said prime mover.

17 33. (Original) The system of Claim 1, further comprising an archiving sampler in fluid
18 communication with said volume of air, said archiving sampler obtaining an archival sample of
19 particles entrained within said volume of air.

20 34. (Original) The system of Claim 33, wherein said archiving sampler comprises:

21 (a) a virtual impactor in fluid communication with said volume of air, said virtual
22 impactor separating a fluid stream into a major flow and a minor flow, the major flow including a
23 minor portion of particles that are above a predetermined size and the minor flow including a major
24 portion of the particles that are above the predetermined size, said virtual impactor including a minor
25 flow outlet through which the minor flow exits the virtual impactor;

26 (b) an archival surface disposed adjacent to said virtual impactor, such that the
27 minor flow of fluid exiting said minor flow outlet is directed toward said archival surface; and

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1 (c) a prime mover drivingly coupled to one of said virtual impactor and said
2 archival surface, causing a relative position of said virtual impactor and said archival surface to be
3 selectively changed over time, so that the minor flow of fluid exiting through said minor flow outlet
4 is directed toward a different portion of said archival surface over time.

5 35. (Original) The system of Claim 1, further comprising a virtual impactor in fluid
6 communication with said volume of air, a virtual impactor in fluid communication with said volume
7 of air, said virtual impactor separating a fluid stream into a major flow and a minor flow, the major
8 flow including a minor portion of particles that are above a predetermined size and the minor flow
9 including a major portion of the particles that are above the predetermined size, said virtual impactor
10 including a minor flow outlet through which the minor flow exits the virtual impactor, said minor
11 flow outlet being in fluid communication with at least one of said triggering sampler and said
12 detecting sampler.

13 36. (Original) The system of Claim 35, wherein the virtual impactor comprises a separation
14 plate for separating particles from a fluid stream produced with fluid drawn from the volume of air,
15 said separation plate having a first surface and an opposing second surface, the first surface including
16 plural pairs of a nozzle and a virtual impactor, the nozzle having an inlet end and an outlet end and
17 tapering from the inlet end to the outlet end, the virtual impactor further comprising a pair of
18 fin-shaped projections, each fin-shaped projection having a convex outer wall and an inner wall, the
19 inner walls of the pair of fin-shaped projections facing each other and being spaced apart to define an
20 upstream minor flow passage therebetween, the convex outer walls of the pair of fin-shaped
21 projections cooperatively presenting a convex surface defining a virtual impact void therethrough, the
22 virtual impact void defining an inlet end of the upstream minor flow passage, the convex surface
23 facing the outlet end of each nozzle such that the nozzle and the upstream minor flow passage are
24 generally aligned with each other.

25 37. (Original) The system of Claim 35, wherein the virtual impactor comprises a separation
26 plate for separating particles from a fluid stream produced with fluid from the volume of air, said
27 separation plate having a first surface and an opposing second surface, the first surface including
28 plural pairs of a nozzle and a virtual impactor, the nozzle having an inlet end and an outlet end and
29 tapering from the inlet end to the outlet end, the virtual impactor is generally haystack-shaped having
30 a convex surface facing the outlet end of each nozzle, the convex surface defining a virtual impact

1 void therethrough, the virtual impact void defining a terminal end of a minor flow passage that
2 communicates between the first and second surfaces.

3 38. (Original) The system of Claim 35, wherein the virtual impactor comprises a separation
4 plate employed for separating a fluid stream produced with fluid from the volume of air into a major
5 flow and a minor flow, the major flow including a minor portion of particles that are above a
6 predetermined size and the minor flow including a major portion of the particles that are above the
7 predetermined size, said separation plate comprising:

8 (a) a block in which is defined a laterally extending passage having an inlet
9 disposed on one edge of the block and an outlet disposed on an opposite edge of the block, said
10 passage having a length extending between said inlet and said outlet, a lateral dimension extending
11 along opposed surfaces of the passage in a direction that is orthogonal to the length and to a
12 transverse dimension extending between the opposed surfaces, said lateral dimension being
13 substantially greater than the transverse dimension of the passage, the opposed surfaces of said
14 passage between which the transverse dimension of the passage is defined generally converging
15 toward each other within the block so that said outlet has a substantially smaller cross-sectional area
16 than said inlet;

17 (b) a transverse, laterally extending slot defined within said block, in fluid
18 communication with a portion of the passage that has the substantially smaller cross-sectional area;
19 and

20 (c) a major flow outlet port defined in the block, in fluid communication with the
21 transverse, laterally extending slot, the major flow entering the slot and exiting the block through the
22 major flow outlet port, while the minor flow exits the block through the outlet of the passage, said
23 major flow carrying the minor portion of the particles and said minor flow carrying the major portion
24 of the particles that are above the predetermined size.

25 39. (Original) The system of Claim 35, wherein the virtual impactor comprises:

26 (a) a block having a front and a rear;

27 (b) a laterally extending passage defined within the block and extending between
28 an inlet at the front and an outlet at the rear of the block, said passage converging to a receiving
29 nozzle between the inlet and the outlet, the inlet having a substantially greater height than the outlet,
30 but the height of the inlet to the passage being substantially less than a width of the passage;

1 (c) an elongate slot extending transverse to the passage and disposed distally of
2 the receiving nozzle; and

3 (d) a major flow orifice formed within the block and intersecting the slot, said
4 major flow orifice providing a fluid path for the major flow to exit the block after changing direction,
5 the minor flow continuing on and out of the outlet of the passage, so that the major portion of the
6 particles above the predetermined size are carried with the minor flow through the outlet of the
7 passage, while the minor portion of the particles above the predetermined size are carried with the
8 major flow through the major flow orifice.

9 40. (Original) The system of Claim 1, further comprising a radial arm collector in fluid
10 communication with said volume of air, said radial arm collector capturing particles entrained in a
11 volume of fluid upon a surface of the radial arm collector, to enable at least one of the triggering
12 sampler and the detecting sampler to obtain a sample of particles entrained in said volume of air.

13 41. (Original) The system of Claim 40, wherein the radial arm collector comprises:

14 (a) a prime mover having a drive shaft that is drivingly rotated;

15 (b) an impeller that is mechanically coupled to the drive shaft and rotated thereby;

16 and

17 (c) a housing for the impeller, said housing defining a fluid passage for conveying
18 the fluid in which the particles are entrained to the impeller, said impeller including vanes that draw
19 the fluid into the housing so that the particles entrained in the fluid impact upon the impeller, being
20 thereby separated from the fluid when impacted by the vanes of the impeller.

21 42. (Original) The system of Claim 40, wherein the radial arm collector comprises:

22 (a) a housing defining a port through which passes the fluid in which the particles
23 are entrained;

24 (b) an electrically energizable motor that rotates a drive shaft; and

25 (c) a combined impact collector and fan mechanically coupled to the drive shaft
26 and rotated thereby, said combined impact collector and fan being disposed within a cavity defined
27 by the housing, rotation of the combined impact collector and fan drawing the fluid into the cavity of
28 the housing through the port, the particles in the fluid impacting the combined impact collector and
29 fan and being retained thereon and being thus separated from the fluid.

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43. (Original) The system of Claim 1, further comprising an alarm electrically coupled to said triggering sampler, said alarm being activated in response to receiving said detection signal from said triggering sampler.

44. (Original) The system of Claim 1, wherein the detecting sampler includes an identification unit to analyze a sample of particles obtained from said volume of air by said detecting sampler to determine if a target substance is present in said sample of particles.

45. (Original) The system of Claim 44, wherein said identification unit comprises a polymerase chain reaction analyzer.

46. (Original) The system of Claim 44, wherein said target substance comprises one of a biological agent and a chemical agent.

47. (Original) The system of Claim 44, wherein said identification unit produces a target detection signal in response to detection of the target substance, further comprising an alarm electrically coupled to the identification unit, said alarm being activated in response to said target detection signal.

48. (Original) The system of Claim 44, further comprising a control unit electrically coupled to said triggering sampler and said detecting sampler, said control unit producing a target detection signal in response to the detection of the target substance by said identification unit.

49. (Original) The system of Claim 47, further comprising a decontamination system in fluid communication with said volume of air, said decontamination system being electrically coupled to said identification unit and operative to introduce a decontamination agent into said volume of air in response to receiving said target detection signal from said identification unit.

50. (Original) The system of Claim 49, wherein said decontamination agent comprises a disinfectant solution selected to destroy a biological contaminant that has been carried into the housing by a parcel.

51. (Original) The system of Claim 1, further comprising a decontamination system in fluid communication with said volume of air and electrically coupled to said triggering sampler, said decontamination system being operative to introduce a decontamination agent into said volume of air in response to receiving said detection signal from said triggering sampler.

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1 52. (Original) The system of Claim 51, wherein said decontamination agent comprises a
2 disinfectant solution selected to destroy biological contaminant that has been carried into the housing
3 by a parcel.

4 53. (Original) A system for detecting harmful contaminants during mail processing, wherein
5 said contaminates are associated with an item of mail, comprising:

6 (a) a housing through which mail is conveyed to detect an item of mail that is
7 contaminated, so that a harmful substance contaminating an item of mail is isolated from the
8 environment outside the housing;

9 (b) a triggering sampler in fluid communication with a volume of air within said
10 housing, said triggering sampler being adapted to obtain particles from an item of mail, said particles
11 being entrained within the volume of air in said housing, said triggering sampler generating a
12 detection signal in response to the particles;

13 (c) a detecting sampler in fluid communication with said volume of air and
14 responsive to the detection signal, said detecting sampler being adapted to obtain a sample of
15 particles within said volume of air in response to receiving said detection signal, to enable an analysis
16 to detect particles of a contaminant that is harmful; and

17 (d) a control unit electrically coupled to the triggering sampler and to the detecting
18 sampler to control the operation of said system, said control unit conveying said detection signal to
19 said detecting sampler.

20 54. (Original) A system for detecting a harmful contaminant that is associated with a parcel,
21 comprising:

22 (a) a housing into which a parcel to be analyzed is placed, so that so any
23 contaminant carried by the parcel is isolated from an environment outside the housing;

24 (b) means for distributing particles associated with a parcel into a volume of air
25 within said housing;

26 (c) a triggering sampler in fluid communication with said volume of air within
27 said housing and operative to detect trace amounts of particles within said volume of air, said
28 triggering sampler generating a detection signal in response detection of such particles; and

29 (d) a detecting sampler in fluid communication with said volume of air and
30 electrically coupled to respond to the detection signal, said detecting sampler obtaining a sample of

1 particles within said volume of air in response to said detection signal, to enable an analysis of such
2 particles to determine if a harmful contaminant is present.

3 55. (Currently Amended) A method for detecting the presence of a chemical or a biological
4 agent in association with a parcel, comprising the steps of:

5 (a) obtaining a first sample of particles associated with said parcel using a first
6 sampling system;

7 (b) determining at least one of a quantitative and a qualitative measure of the first
8 sample of particles;

9 (c) in response to said at least one of the qualitative and the quantitative measure,
10 automatically obtaining a second sample of particles associated with said parcel using a second
11 sampling system; and

12 (d) analyzing the second sample of particles, to determine if at least one of a
13 chemical agent and a biological agent is associated with said parcel.

14 56. (Original) The method of Claim 55, further comprising the step of isolating said parcel
15 from an ambient environment before obtaining said first sample of particles.

16 57. (Original) The method of Claim 55, wherein the step of isolating said parcel from the
17 ambient environment comprises the step of introducing the parcel into a containment chamber kept
18 under a negative pressure relative to an atmospheric pressure of the ambient environment.

19 58. (Original) The method of Claim 57, wherein the step of introducing the parcel into a
20 containment chamber kept under negative pressure comprises the step of utilizing conventional mail
21 processing equipment to convey a plurality of parcels into the containment chamber so that each
22 parcel is individually accessible in the containment chamber.

23 59. (Original) The method of Claim 57, wherein the step of introducing the parcel comprises
24 the step of conveying a plurality of parcels on a conveyor into the containment chamber.

25 60. (Original) The method of Claim 55, wherein the step of obtaining the first sample of
26 particles comprises the step of forming at least one opening in the parcel using a laser to enable
27 particles contained within the parcel to be sampled.

28 61. (Original) The method of Claim 55, wherein the step of obtaining the first sample of
29 particles comprises the step of forming at least one opening in the parcel using a mechanical
30 perforator to enable particles from within the parcel to be sampled.

1 62. (Original) The method of Claim 55, wherein the step of obtaining the first sample of
2 particles comprises the step of using an envelope splitter to open the parcel to enable particles from
3 within the parcel to be sampled.

4 63. (Original) The method of Claim 55, wherein the step of obtaining the first sample of
5 particles comprises the step of compressing the parcel to expel particles from within the parcel, to
6 enable such particles to be sampled.

7 64. (Original) The method of Claim 55, wherein the step of obtaining a first sample of
8 particles further comprises the step of using a blower to direct a jet of air toward the parcel, thereby
9 enhancing an aerosolization of any particles associated with the parcel.

10 65. (Original) The method of Claim 55, wherein the step of determining at least one of a
11 quantitative and a qualitative measure of the first sample of particles associated with the parcel
12 comprises the step of counting a number of particles present in the first sample.

13 66. (Original) The method of Claim 65, wherein the step of determining at least one of a
14 quantitative and a qualitative measure of the first sample of particles comprises the steps of
15 separating the first sample into a major flow and a minor flow, such that the majority of particles are
16 entrained in the minor flow, and counting the particles in the minor flow.

17 67. (Original) The method of Claim 65, wherein the step of determining at least one of a
18 quantitative and a qualitative measure of the first sample of particles comprises the steps of:

19 (a) using a rotating arm collector to collect particles entrained in the first sample
20 of particles;

21 (b) rinsing the collected particles from the rotating arm collector with a rinse fluid;
22 and

23 (c) counting the particles in the rinse fluid.

24 68. (Original) The method of Claim 67, wherein the step of rinsing the collected particles
25 from the rotating arm collector with a rinse fluid comprises the steps of using a rinse fluid that
26 includes an enzyme that causes cellulose to degrade, thereby reducing a build up of paper fibers on
27 said rotating arm collector.

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1 69. (Original) The method of Claim 65, wherein the step of counting the number of particles
2 in the first sample comprises at least one of the steps of:

3 (a) determining a total number of particles in the first sample; and

4 (b) determining a total number of biological particles in the first sample.

5 70. (Original) The method of Claim 69, further comprising the step of determining whether
6 the parcel is potentially contaminated with a harmful agent by determining if the total number of
7 particles in the first sample exceeds a predetermined threshold value.

8 71. (Original) The method of Claim 69, further comprising the step of determining whether
9 the parcel is potentially contaminated by determining if the total number of biological particles in the
10 first sample exceeds a predetermined threshold value.

11 72. (Original) The method of Claim 69, further comprising the step of determining whether
12 the parcel is potentially contaminated by determining if any biological particles are present in the first
13 sample.

14 73. (Original) The method of Claim 55, further comprising the step of determining whether
15 the parcel is potentially contaminated by determining if at least one of the following conditions exist:

16 (a) the total number of particles in the first sample exceeds a predetermined
17 threshold value;

18 (b) the total number of biological particles in the first sample exceeds a
19 predetermined threshold value; and

20 (c) any biological particles are present in the first sample.

21 74. (Original) The method of Claim 55, wherein the step of obtaining a second sample of
22 particles associated with the parcel comprises the step obtaining a sample from a location proximate
23 to where the first sample was obtained.

24 75. (Original) The method of Claim 55, wherein the step of obtaining a second sample of
25 particles associated with the parcel comprises the steps of separating the second sample into a major
26 flow and a minor flow, such that the majority of particles are entrained in the minor flow; and,
27 directing the minor flow toward a particle collector.

28 76. (Original) The method of Claim 55, wherein the step of obtaining a second sample of
29 particles associated with the parcel comprises the step of using a rotating arm collector to collect
30 particles entrained in the second sample.

1 77. (Original) The method of Claim 76, wherein the step of obtaining a second sample of
2 particles associated with the parcel further comprises the steps of:

3 (a) rinsing the collected particles from the rotating arm collector with a rinse fluid,
4 and

5 (b) collecting the rinse fluid containing the particles rinsed from the rotating arm
6 collector to obtain the second sample.

7 78. (Original) The method of Claim 55, wherein the step of analyzing the second sample
8 comprises the steps of analyzing any particulates obtained from the second sample to detect a specific
9 one of a chemical agent and a biological agent.

10 79. (Original) The method of Claim 55, further comprising the step of decontaminating the
11 parcel after obtaining the second sample if it is determined that the parcel is contaminated with one of
12 a biological and a chemical agent.

13 80. (Original) The method of Claim 55, further comprising the step of activating an alarm if
14 it is determined that the parcel is contaminated with one of a biological and a chemical agent.

15 81. (Original) The method of Claim 55, further comprising the step of decontaminating the
16 parcel after obtaining the second sample if it is determined that the parcel is contaminated with one of
17 a biological and a chemical agent.

18 82. (Original) The method of Claim 55, further comprising the step of decontaminating the
19 parcel and the area proximate to the parcel after obtaining the second sample if it is determined that
20 the parcel is contaminated with one of a biological and a chemical agent.

21 83. (Original) The method of Claim 55, further comprising the step of temporarily stopping
22 processing of additional parcels to detect contamination in such additional parcels if it is determined
23 that the parcel is contaminated with one of a biological and a chemical agent.

24 84. (Original) The method of Claim 55, further comprising the step of obtaining an archival
25 sample if it is determined that the parcel is potentially contaminated with one of a biological and a
26 chemical agent.

27 85. (Original) The method of Claim 84, wherein the step of obtaining the archival sample
28 comprises the step of directing particles associated with the parcel toward a specific location on an
29 archival surface, to deposit a spot of particles on the archival surface, such that each spot of particles
30 deposited on the archival surface represents an archival sampled from a different parcel.

1 86. (Original) The method of Claim 84, wherein the step of obtaining the archival sample
2 comprises the steps of separating a flow of fluid containing particles associated with the parcel into a
3 major flow and a minor flow, such that the majority of particles from the flow of fluid are entrained
4 in the minor flow, and directing the minor flow toward an archival surface, to deposit a spot of
5 particles on the archival surface, such that each spot of particles deposited on the archival surface
6 represents an archival sampled from a different parcel.

7 87. (Original) The method of Claim 55, further comprising the step of obtaining an archival
8 sample if it is determined that the parcel is contaminated with one of biological and a chemical agent.

9 Please add new Claim 88 as follows:

10 --88. (New) A system for detecting a detecting hazardous particles associated with a parcel,
11 comprising:

12 (a) a housing into which a parcel to be analyzed can be placed, so that a parcel can
13 be isolated from an environment outside the housing;

14 (b) a triggering sampler in fluid communication with a volume of air within said
15 housing, said triggering sampler capable of detecting particles associated with a parcel that are
16 entrained within the volume of air in said housing, said triggering sampler regularly sampling the air
17 in said housing and generating a detection signal in response to the detection of such particles; and

18 (c) a detecting sampler in fluid communication with said volume of air and
19 electrically coupled to respond to the detection signal from said triggering sampler, said detecting
20 sampler, in response to said detection signal, removing particles entrained within said volume of air,
21 thereby obtaining a sample of particles, to enable an analysis to determine if particles associated with
22 a parcel that are collected by the detecting sampler are hazardous.--

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